

REMARKS

Claims 6-8, 12-14 and 18-21 have been amended.

The Examiner has rejected applicants' claims 6-7, 12-13, 18 and 20 under 35 USC § 103(a) as being unpatentable over the Lowy, et al. (US 5,768,151) patent in view of the De Angelis, et al. (US 5,552,824) patent. The Examiner has further rejected applicants' claims 8, 14, 19 and 21 also under 35 USC § 103(a) based on the latter two patents in view of the Iijima (US 6,286,071) patent. With respect to applicants' claims, as amended, these rejections are respectfully traversed.

Applicants' independent claims 6 and 12 have been amended to better define applicants' invention. Amended claim 6 recites an image pickup apparatus comprising: a control unit adapted to determine whether said image pickup apparatus is set as a master camera; a communication unit adapted to (a) transmit a time stamp to another image pickup apparatus if it is determined by said control unit that said image pickup apparatus is set as the master camera, and (b) receive the time stamp generated in another image pickup apparatus set as the master camera if it is determined by said control unit that said image pickup apparatus is not set as the master camera, wherein the time stamp is used to synchronize frame synchronization signals generated in said image pickup apparatus and another image pickup apparatus; a time stamp generating unit adapted to generate the time stamp using time information provided by said communication unit if it is determined by said control unit that said image pickup apparatus is set as the master camera, wherein the time information is used to manage a communication cycle of said communication unit; a frame synchronization signal generating unit adapted to (a) generate a frame synchronization signal using the time stamp

generated by said time stamp generating unit and time information if it is determined by said control unit that said image pickup apparatus is set as the master camera, and (b) generate a frame synchronization signal using the time stamp received by said communication unit and the time information if it is determined by said control unit that said image pickup apparatus is not set as the master camera; and an image data generating unit adapted to generate image data using the frame synchronization signal generated by said frame synchronization signal generating unit. Amended independent method claim 12 has features similar to amended claim 6.

In applicant's invention of the amended claims, an image pickup apparatus is arranged to include a control unit which determines whether the image pickup apparatus is set as a master camera. If the control unit determines that the image pickup apparatus is set as the master camera, a time stamp is generated (e.g., 405 in Fig.4) using time information for managing a communication cycle, the time stamp is transmitted to another image pickup apparatus, and a frame synchronization signal is generated using the generated time stamp and the time information to generate image data. On the other hand, if the control unit determines that the image pickup apparatus is not set as the master camera, a time stamp generated in another image pickup apparatus set as the master camera is received, a frame synchronization signal is generated using the received time stamp and the time information to generate image data.

The above-described features of the present invention are not taught or suggested by the cited Lowy, et al. and DeAngelis, et al. patents. With respect to these patents, the Examiner states that "Lowry, et al. disclose means for synchronizing SYNCH SIGNAL to other cameras and video equipments (figure 2 shows a SYNCH SIGNAL is sent from master

camera 11 to slave camera 12, column 5, lines 5-12).” Thus, this patent, as the Examiner states merely teaches supplying a SYNCH SIGNAL from a master camera to a slave camera. The patent thus does not teach or suggest an image pickup apparatus having a control unit which determines whether the image pickup apparatus itself is set as a master camera. Nor can it, therefore, teach or suggest that if the control unit determines that the image pickup apparatus is set as the master camera, generating a time stamp using time information for managing a communication cycle, transmitting the time stamp to another image pickup apparatus, and generating a frame synchronization signal from the generated time stamp and the time information to generate image data, nor that if the control unit determines that the image pickup apparatus is not set as the master camera, receiving a time stamp generated in another image pickup apparatus set as the master camera and generating a frame synchronization signal using the received time stamp and the time information to generate image data. There is simply no such control unit in the Lowry, et al. patent.

The Examiner has further argued, with respect the DeAngelis, et al. patent, “De Angelis et al. discloses a network with a plurality of cameras of which one is a primary camera C1 and the rest are slave cameras Cj (figures (9A-9B, column 21, lines 7-34), and DeAngelis et al. also disclose each tunable camera periodically communicates (communication cycle) with a precision timer and after initially establishing synchronous time, periodically re-tunes its clock rate to maintain synchronicity.” This patent thus discloses that a main camera C1 supplies time information of a frame to a slave camera which adjusts a timer thereof on the basis of the received information (column 21, lines 7-34 and column 22, lines 31-36). That is, the patent merely teaches that a slave camera is arranged to adjust therein a time difference between a timer thereof and a precision time source from the

master camera.

Like the Lowry, et al. patent, the DeAngelis, et al. patent, therefore, fails to teach or suggest an image pickup apparatus arranged to have a control unit which determines whether the image pickup apparatus itself is set as a master camera. Nor can it, therefore, teach or suggest that if the control unit determines that the image pickup apparatus is set as the master camera, generating a time stamp using time information for managing a communication cycle, transmitting the time stamp to another image pickup apparatus, and generating a frame synchronization signal from the generated time stamp and the time information to generate image data, nor that if the control unit determines that the image pickup apparatus is not set as the master camera, receiving a time stamp generated in another image pickup apparatus set as the master camera and generating a frame synchronization signal using the received time stamp and the time information to generate image data. The DeAngelis, et al. patent clearly does not have such a control unit.

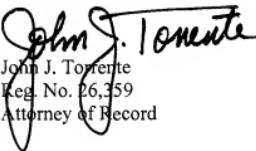
Accordingly, since neither the Lowry, et al. patent nor the DeAngelis, et al. patent discloses the control unit of applicants' invention, the combined teachings of the references also fails to teach or suggest such unit. Applicants' amended claims 6 and 12, and their respective dependent claims, in reciting such feature and in combination with the other recited features, thus patentably distinguish over the Lowry, et al. and DeAngelis, et al. patents. The Iijima patent fails to add anything to the Lowy, et al. and De Angelis, et al. patents to change this conclusion.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is

respectfully requested.

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Respectfully submitted,


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